# Other useful publications available to help you through the development process:

Title 8, Planning and Zoning, County Ordinance Code

Title 9, Subdivisions, County Ordinance Code

Title 10, Public Works and Flood Control, County Ordinance Code

Your Development Project and the Public Works Department

After Your Project's Tentative Approval:
The Processing Phase
(Also, see "Information Packet" available from the Engineering Services Division)

Floodplain Management Program: Answers to Commonly Asked Questions

# Public Works Conditions of Approval:

What Do They Mean?



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**NOTE:** Throughout the text of this booklet, some words will appear in **bold type**. These words are defined for you in the <u>Glossary of Terms</u> at the end of the booklet.

# **Public Works Conditions of Approval**

If you are applying for a discretionary permit (e.g., Major or Minor Subdivision, Land Use Permit, Variance Permit, or Development Plan), there are many agencies whose requirements you must satisfy before final approval can be granted. In the case of the Public Works Department, these requirements are reflected in the Conditions of Approval and the Advisory Notes. Because Public Works Conditions of Approval often involve actual improvements to the road and drainage system (infrastructure), they can be the most expensive and difficult Conditions of Approval to comply with. Sometimes an applicant will decide that it is not the right time to pursue a development based on the magnitude of the Public Works Conditions of Approval. For this reason, you should contact the Public Works Department as early in the process as possible to gain an understanding of what will be involved in developing your property.

When you receive your Conditions of Approval, read them carefully. If you have any questions which are not answered in the following guidelines, you are encouraged to contact the staff person in the Public Works Department who reviewed your development application. Your project may be subject to any combination of the following:

**Frontage Improvements:** If you are subdividing a parcel of land, and your parcel fronts a public road, your Conditions of Approval will almost certainly include the installation of frontage improvements. Land use permits for new businesses, churches, and other traffic-generating projects are also likely to be conditioned to install frontage improvements. The term "frontage improvements" refers to the installation of curb, sidewalk, street lights, median is-

lands, landscaping, pavement widening, signs and pavement striping, and drainage improvements which may be necessary to properly drain the roadway. Required pavement widths will be specified in the Public Works Conditions of Approval.

In general, sidewalks will be required along all streets in areas which are zoned R-12 or denser, or where the fronting property is zoned for multiple family, business, or commercial land uses. Other circumstances requiring sidewalks are outlined in Article 96-8.4 of the County Ordinance Code (Title 9).

Curbs shall be required along all streets in areas which are zoned R-20 or denser, or where the fronting property is zoned for multiple family, business, or commercial land uses. Also, if the grade of the street is less than one percent or more than six percent, curbs shall be required. Curbs are generally placed to coincide with the ultimate width of the road, and the pavement is widened to adjoin the new curb. Refer to Article 96-12.202 of the County Ordinance Code (Title 9) for more information regarding curb requirements.

If overhead utility distribution facilities (e.g., power, telephone, or cable lines) exist along the project frontage, the subdivider will be responsible for placing these facilities underground and removing the corresponding poles, unless the property is in an agriculturally zoned area. All new utility distribution facilities shall be installed underground.

If frontage improvements are not appropriate at the time of the development, but are likely to be needed in the future, you may be conditioned to execute a **deferred improvement agreement (DIA)**. A DIA is an agreement between you and the County stating that you agree to install the frontage improvements at a future date when the County deems them necessary. The DIA will be on file with the County and will run with the deed to the property. No DIA is allowed for subdivisions unless they are minor subdivisions.

**Onsite Road Improvements:** This section of conditions refers to internal roads within a subdivision which are proposed to be public (i.e., County-maintained). In general, curbs, sidewalks, pavement widths, cul-de-sac turnarounds at the end of the road, and street drainage criteria are the same for internal roads as they are for frontage roads. However, because these will be new County roads, and they will service the subdivision itself, no deferred improvement agreements are allowed for internal or onsite roads. The required pavement and right of way widths for these roads will be specified in the Conditions of Approval.

**Offsite Road Improvements:** Public road improvements which are required of a development which are neither along the frontage of the parcel nor on internal roads are usually conditioned only to major subdivisions or to land use permits which will generate a significant amount of traffic. Special circumstances, such as an existing safety or capacity problem which could be corrected with the project, could also warrant offsite public road improvement Conditions of Approval.

**Private Roads:** If an on-site road is to be privately maintained, different criteria apply. In general, the minimum pavement width for a private road is 20 feet, with 2-foot wide rock shoulders on each side. Greater widths are often required depending on the number of parcels which

will ultimately be served by the private road. The minimum widths apply to the private road from the project site to the public road, so offsite private road improvement Conditions of Approval are common even for minor subdivisions. Your development will also be subject to Fire District requirements, which may include additional Conditions of Approval for the private road and an adequate turnaround, if necessary.

All applications which propose private roads or which front existing private roads may be conditioned to enter into a **road maintenance agreement**. The agreement is required to insure that the proposed private road will be maintained, and that each property that is serviced by the proposed private road will share in the cost of its maintenance. If a maintenance agreement does not already exist over the private road, the applicant will be required to develop one. A sample agreement is available from the Public Works Department, Engineering Services Division.

**Road Dedications:** All developments which front on existing or proposed public roads will be conditioned to convey to the County, by **Offer of Dedication**, additional right of way on the fronting public road as required for the planned future width. The Offer of Dedication is only required when the existing right of way along the frontage is inadequate for future needs. The County will use this right of way for future road improvements. Required right of way widths are based on the General Plan and the County's Road Log, and will be specified in the Conditions of Approval.

#### **Relinquishment of Abutter's Rights of**

**Access:** When a project is located on a busy road, it is

generally safer to limit the number of driveways which directly access the roadway. To this end, the County requires the relinquishment of **abutter's rights of access** along such roadways whenever it is possible to access the property via a less traveled road. Relinquishment of these rights will restrict you and all future owners from accessing directly onto the busy road, which could result in additional traffic conflicts.

#### **Street Lights:** Installation of street lights is required:

- 1. Within one mile of a school site (existing or proposed).
- 2. In districts zoned R-12 or denser.
- 3. In districts zoned for multiple-family residential, business, or commercial uses.
- 4. Where safety dictates (e.g., at street intersections and at sag vertical curves).

The final number and location of street lights to be required, if any, are usually determined by the Public Works Department, Engineering Services Division, after tentative approval of the development. Chapter 96-6 of the County Ordinance Code (Title 9) gives specific information regarding street lighting.

If not already annexed, the property will be required to annex into County Service Area L-100, which will assess an annual fee to the property owner for maintenance of street lights. The annexation process may take approximately 4-6 months to complete. The annexation is usually required to be completed prior to issuance of building permits (for Land

Use Permits or Development Plans) or prior to filing the final/parcel maps (for major/minor subdivisions).

Landscaping: If your development is located on a major road with publicly maintained frontage or median land-scaping, you may be required to install permanent land-scaping and automatic irrigation facilities within the parkway and median areas. You should contact the County Public Works Department to determine the nature of the work that will be required, if any. Funding and maintenance of the new plantings will be your responsibility until the County Landscaping District accepts them for maintenance.

If your Conditions of Approval require landscaping, and unless other arrangements are made, you will be required to submit three sets of landscape and irrigation plans and a cost estimate from a licensed Landscape Architect to the Public Works Department for review. Plan reviews and field inspections by the County are paid for through a fee which is collected at the time you submit your plan. If you have landscaping requirements you will be required to annex your development into the County Landscape District so that the County may take over maintenance of the landscaping once it is established.

#### **Drainage Improvements (Collect and**

**Convey):** Since most land development activities result in an increase in the amount of **impervious surfaces** with a resulting increase of storm water runoff, the County has adopted drainage ordinances to protect downstream properties. These ordinances, contained in Title 9 of the County Ordinance Code, control the concentration, acceleration, and diversion of the storm water flows.

Among these ordinance requirements is the "collect and convey" requirement. This means that the developer of a parcel of land must install adequate storm drains within and outside the development to ensure that downstream properties are not damaged by the development. The storm drains must extend from the development to a drainage facility of adequate capacity to handle the storm flow without flooding or to an adequate natural watercourse (usually a creek) with definable bed and banks.

Compliance with the "collect and convey" requirement can be very costly. In some instances, the Flood Control District has information that may indicate the magnitude of this requirement. You are welcome to review this information with either the County Public Works or Flood Control District staff. You should recognize that neither the County nor the District can provide you with accurate information on costs.

It is recommended that you contact a professional Civil Engineer for assistance in determining the magnitude and cost of the drainage improvements necessary to meet the various County drainage ordinance requirements for your development.

All land development is subject to the collect and convey requirements of the Ordinance Code, with a few exceptions:

- 1. If the development is residential and is located east of Marsh Creek and results in parcel sizes of 10 acres or larger;
- 2. If the development is residential and is located west of Marsh Creek and results in parcel sizes of 5 acres or larger;

- 3. If the development proposal consists of a secondary unit, second residence, mobile home, caretaker unit or other similar auxiliary structure which results in the creation of no more than 1,500 square feet of impervious surface area;
- 4. If the applicant submits **findings** (see Section 92-6.002 in Title 9 of the County Ordinance Code) which substantiate that the project is not in a FEMA 100-year flood hazard area, that storm waters from the project will not foster downstream property damage or adverse flooding impacts, that the proposed storm drainage will be characteristic of those facilities which exist in the area, and that there is some benefit to the surrounding properties in the watershed. Public Works staff must concur with the findings for an exception to be granted under Section 92-6.002.
- 5. If, based on its unique circumstances, the Board of Supervisors grants an exception for a specific project. Exceptions of this type are not granted without Public Works staff concurrence, and are extremely rare.

Exceptions from the collect and convey requirement are generally granted only under the condition that the applicant maintains the existing drainage pattern and does not allow concentrated storm water to discharge onto adjacent properties.

**Creek Mitigation Fees:** Under most circumstances, the collect and convey requirements of Title 9 are satisfied by discharging storm water to a natural watercourse, usually a creek. However, some creeks in the County, such as

the San Ramon Creek and San Pablo Creek, do not have adequate capacity to handle the storm water from all the development in their **watersheds**. When one development cannot feasibly perform the creek improvements necessary to increase the capacity of the entire creek, the Public Works Department may direct the applicant to construct creek capacity improvements commensurate with the size of the development.

If you choose, you may pay a fee for these improvements in lieu of actual construction of creek improvements. The fee is applied equitably to all developments in the creek's **watershed** area. The fee is based on the amount of impervious surface that will be created (e.g., asphalt paving, rooftops, etc.) by each development so that each development pays its "fair share" of the cost of the improvements. The fee for a development which lies in the San Ramon Creek watershed, for example, is \$0.10 per square foot of impervious surface created.

If your development is in the watershed area of one of these creeks, even if the creek does not cross the property, you will be responsible for creek improvements or payment of the corresponding fee.

**Creek Structure Setbacks:** If your property is traversed by a creek, the erosive nature of the creek must be accounted for when developing the property. If you are subdividing the property, you will be conditioned to relinquish "development rights" over the structure setback area of the creek. Chapter 914-14 of the County Ordinance Code, entitled "Rights of Way and Setback," outlines the procedure for defining a structure setback area. When you "relinquish development rights" over an area, it means that you are forfeiting your right to construct buildings or struc-

tures within that area. This will assure the County that no new structure on the property is subject to damage from soil erosion caused by the creek or by significant storm events. The applicant should be aware that the creek structure setback may reduce the "buildable" area on the property to the point that it eliminates some lots in the subdivision. Your Civil Engineer should be able to give you an idea as to where the setback line will be.

If you are not subdividing, but are constructing a new structure on your property inside the structure setback area, you will be required to do a special foundation design for approval by the Building Inspection Division of the Department of Conservation and Development. This foundation will need to be designed by a geotechnical engineer. Community Development also has criteria for structure setbacks from certain creeks in order to protect the riparian habitats associated with them.

**Improvement Plans:** If you are conditioned to construct actual road or drainage improvements, you will be required to submit **improvement plans** to the Public Works Department (prepared, signed and stamped by a registered Civil Engineer), for all improvements required by the Ordinance Code or the Conditions of Approval for your development. The plans will be checked for completeness by a County staff engineer.

**Sight Distance:** When you are stopped at an intersection, the furthest distance from which you can see an approaching car is called the "sight distance." Roads with different speed limits and traffic volumes require different sight distances. CALTRANS has put forth specifications for determining the proper sight distance for various **design** 

speeds in their Highway Design Manual. The Conditions of Approval will specify the design speed that the intersection or driveway must be constructed to, and your engineer, with the help of the CALTRANS Highway Design Manual, will be able to determine the proper sight distance and to design the intersection accordingly. Often, meeting the sight distance requirements means grading, trimming of vegetation, pavement widening, or even realignment of a section of roadway. It is to your advantage to resolve any sight distance problem to the satisfaction of the Public Works staff early in the development process.

**NPDES:** All development in Contra Costa County is required to comply with all regulations, and practices consistent with the National Pollutant Discharge Elimination System (NPDES) for municipal, construction, and industrial activities. Compliance with the NPDES requirements usually involves implementing various common-sense measures to reduce pollution of stormwater runoff. Typical measures may include painting stormwater inlets with anti-pollution messages, sweeping parking lots, or constructing grassy swales to filter pollutants.

**Provision C.3 of NPDES:** If the subject property to be developed creates or replaces more than 10,000 square feet of impervious surface area, the applicant will be conditioned to submit a **Storm Water Control Plan (SWCP)** for the review of the Public Works Department in compliance with the Stormwater Management and Discharge Control Ordinance, the Stormwater C.3 Guidebook (available at <a href="https://www.cccleanwater.org">www.cccleanwater.org</a>), and requirements of the Regional Water Quality Control Board. The SWCP shall be certified by a licensed professional Civil Engineer, Architect, or Landscape Architect and accompanied by a completed SWCP

checklist. The purpose of the SWCP is to specify how the ultimate built project will incorporate site design characteristics, landscape features, and Best Management Practices (BMPs) that minimize imperviousness, retain or detain storm water, slow runoff rates, and reduce pollutants in post-development runoff. The SWCP must incorporate measures to treat storm water runoff before it is discharged from the site. These treatment facilities must be designed to meet the minimum criteria specified in the Stormwater C.3 Guidebook and by the Regional Water Quality Control Board. The SWCP must also identify responsibility for and a mechanism to ensure maintenance of treatment facilities in perpetuity (this shall include any necessary land rights and funding mechanisms). The SWCP is separate from and in addition to a Storm Water Pollution Prevention Plan (SWPPP). The SWCP must be coordinated and integrated with preparation of the site layout, landscaping, and drainage.

If the subject property to be developed creates or replaces more than one acre of impervious surface area, the applicant will also be required to comply with the Hydrograph Modification Management Plan (HMP). This requires new development projects to be designed so post-project runoff does not exceed estimated pre-project rates or durations.

The preparation and design of the SWCP may be costly and time consuming, so it is to your advantage to consult with a Civil Engineer, Architect, or Landscape Architect early in the process to determine if you will be required to comply with Provision C.3 and how you can best incorporate these features into the design of your development.

# **Advisory Notes**

There is a section which follows your Conditions of Approval entitled **Advisory Notes**. These are included to make the applicant aware of requirements which are outside the scope of the Conditions of Approval. Advisory notes usually inform the applicant either of adopted fee ordinances or of requirements which are outside the jurisdiction of the Public Works Department. The following is a summary of some of the issues which may be addressed in your advisory notes:

FEMA Flood Hazard Zone: If your project lies within the 100 year flood boundary as designated on the Federal Emergency Flood Rate Maps, you should be aware of the requirements of the Federal Flood Insurance Program and the County Flood Plain Management Ordinance (Ordinance No. 99-35) as they pertain to future construction of any structures on your property. A helpful booklet on the Floodplain Management Program, entitled "Answers to Commonly Asked Questions and Guide for Residential Construction Within Special Flood Hazard Areas," is available at the Contra Costa County Application and Permit Center or at the front counter of the Public Works Department.

**Department of Fish and Game:** If your project is likely to impact a natural watercourse or wetlands, it may be subject to the requirements of the Department of Fish & Game. It is your responsibility to notify the Department of Fish & Game of any proposed construction within your development that may affect any fish and wildlife resources, according to the Fish & Game Code.

**Army Corps of Engineers:** If your project is under the Department of Fish and Game's jurisdiction, it is likely that it is also subject to the requirements of the Army Corps of Engineers. You are responsible for notifying the appropriate district of the Corps of Engineers to determine if a permit is required and if it can be obtained.

Area of Benefit Fees: The unincorporated County is divided into what are called Areas of Benefit. Within each Area of Benefit (AOB), several road improvement projects have been planned which will alleviate known traffic congestion or traffic safety problems. These projects are paid for by AOB Fees (some are aided by other funding sources). All developments which create traffic will be subject to an AOB fee. The fee will vary depending on which area of benefit your property is in, the size of the development, and the number of automobile trips your development will generate during the peak hours. The fee shall be paid prior to issuance of a building permit. A complete fee schedule is available at the front counter of the Public Works Department.

**Drainage Area Fees:** Drainage Area fees are similar to AOB fees, except that they have been set up to help fund drainage improvements. But while every parcel in the unincorporated County is in an Area of Benefit, not every parcel is in a Drainage Area. The drainage area fee will vary depending on which drainage area your property is in, if any, and the amount of impervious surface your project will generate. Your project engineer will be able to tell you if you are in an adopted drainage area. The fee shall be paid prior to filing of the final or parcel map. A drainage fee schedule is available at the front counter of the Public Works Department or at the Application and Permit Center.

# **Glossary of Terms**

**Abutter's Rights of Access:** The right of a property owner to access a public road directly from the property.

**Advisory Notes:** Notices to the applicant in the development application staff report which inform the applicant of adopted fee ordinances or of other agencies which may have jurisdiction over the project.

**Design Speed:** The speed for which the horizontal and vertical curves, sight distance, and turn lanes on a road are designed.

**Deferred Improvement Agreement (DIA)**: An agreement between a property owner and the County which states that the property owner will construct improvements (usually along the property frontage) when deemed necessary by the County.

**Findings:** Any legal conclusion drawn which can be shown to have been reached after consideration of factual information.

**Impervious Surface:** Ground cover which does not allow water to "soak in" (e.g., building foundations, roofs, asphalt, or concrete driveways).

**Improvement Plans:** A set of plans, prepared by a registered Civil Engineer submitted to the Public Works Department for review, for the construction of all physical improvements required for a development by either the Conditions of Approval or the County Ordinance Code.

**Offer of Dedication:** An agreement to convey right of way to the County (or other public entity) without compensation.

**Road Maintenance Agreement:** A formal agreement between property owners who access the public roadway system via the same private road to share equitably in the cost of the private road's maintenance.

**Stormwater Control Plan (SWCP):** A plan to specify how the ultimate built project will incorporate site design characteristics, landscape features, and Best Management Practices (BMPs) that minimize imperviousness, retain or detain storm water, slow runoff rates, and reduce pollutants in post-development runoff. The plan includes a Report and Exhibit and is prepared by a licensed professional Civil Engineer, Architect, or Landscape Architect.

**Watershed:** The area of land draining into a creek or drainage system at a given location.